DETAILED ACTION

Applicant's response on January 24, 2011 to the Office Action dated July 15, 2010 is acknowledged. Claims 42, 47 have been amended. Claims 40-43, 47-51 are present for examination.

The amendment to the rejected claims have been considered. All objections and rejections of the claims in the instant application are hereby withdrawn.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Stacy Landry on March 25, 2011.

Claims 40, 41, 42, 47 replace:

" - -SEQ ID NO.: - -" with " - - SEQ ID NO: - - "

Amend claim 40 (c):

(c) the O-RS comprises an amino acid sequence that is at least 98% identical to that of a naturally occurring tyrosyl aminoacyl-tRNA synthetase (TyrRS) **of SEQ ID NO: 2** and comprises two or more amino acids selected from the group consisting of: glycine, serine, or alanine at a position corresponding to Tyr37 of *E. coli* TyrRS; aspartate at a position corresponding to Asn126 of *E. coli* TyrRS; asparagine at a position corresponding to Asp182 of *E. coli* TyrRS; alanine, or

valine, at a position corresponding to Phe183 of *E. coli* TyrRS; and, methionine,

valine, cysteine, or threonine, at a position corresponding to Leu186 of *E. coli*

TyrRS.

Cancel part (c) of claim 42.

47. (Currently Amended). An isolated polynucleotide selected from the group consisting of:

(b) a polynucleotide that is complementary to [[a]] the polynucleotide sequence of (a);

(c) a polynucleotide encoding a polypeptide that comprises [[an]] the amino acid sequence as set forth in any one of SEQ ID NO: 48-63;

(d) a polynucleotide that encodes [[a]] **any of the** polypeptide of claim 42;

(f) a polynucleotide that is at least 98% identical to [[a]] **any of the** polynucleotide of (a), (b), (c), (d), or (e)

Conclusion: Claims 40-43, 47-51 are allowed.

EXAMINER'S AMENDMENT

The following is an examiner's statement of reasons for allowance:

Eukaryotic cells comprising ORS encoded by polynucleotides selected from SEQ

ID NO: 20-35 or the ORS of SEQ ID NO: 48-63 with the specific mutations in two

or more mutations at position 37, 126, 182, 183 and 186 relative to the ORS of

SEQ ID NO: 2 (*E. coli*) are not anticipated by the prior art.

Any comments considered necessary by applicant must be submitted no

later than the payment of the issue fee and, to avoid processing delays, should

preferably accompany the issue fee. Such submissions should be clearly labeled

"Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from

the examiner should be directed to KAGNEW H. GEBREYESUS whose

telephone number is (571)272-2937. The examiner can normally be reached on

8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, MANJUNATH RAO can be reached on 571-272-0939.

The fax phone number for the organization where this application or proceeding

is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

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PAIR. Status information for unpublished applications is available through

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direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

/KAGNEW H GEBREYESUS/
Examiner, Art Unit 1656
March 23, 2011